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SPECIFICATION

1. TITLE OF INVENTION Fishing Rod

2. CLAIM

A fishing rod comprising:

a fishing rod material made of woven fabric or pull-arranged sheet reinforced with reinforcement fiber which is impregnated with synthetic resin;

a reel seat holding tube made of the same material with said fishing rod material and fittedly attached to back end outer periphery of said fishing rod material in such way that the reel seat holding tube projects backward;

a seat tube made of the same material with said fishing rod material, fixed with a fixing hood at one end thereof, and fittedly fixed to outer periphery of said reel seat holding tube; and

a hollow male screw tube fitted together with a movable hood, screwed with a nut, and fittedly fixed to outer periphery of said reel seat holding tube.

3. DETAILED DESCRIPTION OF INVENTION

(Field of the Invention)

The present invention is related to a fishing rod having a reel seat attached to back end outer periphery of a fishing rod material.

(Prior Art)

In the conventional fishing rod, a grip member made of natural cork material and the like and a pipe reel seat are fittedly fixed back end outer periphery of the fishing rod individually. Since an outer diameter of a fishing rod material 1 is smaller than an inner diameter of a pipe reel seat 12 as in FIG. 2, a paper tube13 and a medium cylinder made of thermoplastic synthesis resin are disposed therebetween. The paper tube becomes heavy and strength becomes reduced when water is contained. Therefore, there is a problem that paper tube can not be employed because water enters from a joint of both portions when a reel seat portion of the pipe reel seat and a hollow male screw tube portion are separately formed. And there is a further problem that vibration due to a game hit is difficult

to transmit to hands gripping the reel leg and the pipe reel seat when the paper tube, the synthetic resin medium tube and the metal pipe reel seat which include different materials are provided to outer periphery of the fishing rod.

(Object of the Invention)

In view of the above problems, the reel seat holding tube made of the same material with the fishing rod material is fittedly attached to back end outer periphery of the fishing rod material, and the seat tube made of the same material with the fishing rod material is fitted together with outer periphery of the reel seat holding tube. An object of the present invention is to provide a fishing rod which enables to reduce weight, improve strength against water, and improve hit transmittance.

(Configuration of the Invention)

A fishing rod comprises: a fishing rod material made of woven fabric or pull-arranged sheet reinforced with reinforcement fiber which is impregnated with synthetic resin; a reel seat holding tube made of the same material with said fishing rod material and fittedly attached to back end outer periphery of said fishing rod material in such way that the reel seat holding tube projects backward; a seat tube made of the same material with said fishing rod material, fixed with a fixing hood at one end thereof, and fittedly fixed to outer periphery of said reel seat holding tube; and a hollow male screw tube fitted together with a movable hood and screwed with a nut, and fittedly fixed to outer periphery of said reel seat holding tube.

(Embodiment)

Hereinafter, an embodiment of the present invention will be explained with reference to drawings. In FIG. 1, a fishing rod material 1 is made of woven fabric or pull arranged sheet reinforced with glass fiber and carbon fiber, etc. which are impregnated with thermoset synthetic resin and formed in a hollow state. A hollow reel seat holding tube 2 is made of woven fabric or pull arranged sheet reinforced with reinforcement fiber impregnated with the same synthetic resin with the fishing rod material 1, one end of the hollow reel seat holding tube

2 is fittedly attached to back end outer periphery of the fishing rod material, and the other end of the reel seat holding tube is projected backward.

A hollow seat tube 4 is made of woven fabric or pull arranged sheet reinforced with reinforcement fiber impregnated with the same synthetic resin with the fishing rod material 1. And the hollow seat tube 4 fixed with a fixing hood 3 at one end thereof is fittedly fixed to outer periphery of the above mentioned reel seat holding tube 2 and a hollow male screw tube 6 screwed together with a nut 5 is fittedly fixed to outer periphery of the reel seat holding tube 2. And a movable hood 7 is slidably fitted tc outer periphery of the above-mentioned seat tube 4 and the hollow male screw tube 6.

A grip member 8 made of natural cork etc. is fittedly fixed to outer periphery of the above-mentioned fishing rod material 1, the reel seat holding tube 2 and the fixing hood 3 to form a fore grip. An extension grip is formed from a cylindrical portion 9 which is removably fitted to an inner diameter of the reel seat holding tube 2 projected backward and a grip member 10 which is made of natural cork.

A reel leg attaching plate 11 is attached between the fixing hood 3 and the movable hood 7 of the above-mentioned fishing rod. The extension grip is not used when a gear is thrown and the extension grip is attached for reel operation when fishing line is rewound on the reel.

With the fishing rod having the above mentioned configuration, the reel seat holding tube 2 is fittedly attached to outer periphery of the fishing rod material 1 projecting backward, so that a gap between the outer diameter of the thin fishing rod material 1 and the inner diameter of the thick seat tube 4 of the reel seat and the hollow male screw tube 6 is filled. Since the reel seat holding tube 2 and the seat tube 4 are respectively formed of the reinforcement fiber impregnated with the same synthetic resin with the fishing rod material 1, strength against water is increased and weight is reduced as well as strength is increased. Since the seat tube 4 and the hollow male screw tube 6 are separated, weight reduction is not

affected even though the hollow male screw tube 6 is made of metal. Since the reel seat holding tube 2 and the reel seat tube 4 are made of the same material with the fishing rod material 1, vibration of hit is satisfactorily transmitted to hands gripping the seat tube 4 and the reel leg, thereby improving hit sensitivity.

The above mentioned extension grip removably fitted to the reel seat holding tube 2 may be replaced with a stopper.

(Effect of the Invention)

As mentioned above, with the present invention in which one end of the reel seat holding tube is fittedly attached to back end outer periphery of the thin fishing rod material and the other end of the reel seat holding tube is projected backward, and the thick seat tube of the reel seat and the hollow male screw tube are fitted together to the outer periphery of the reel seat holding tube, strength against water is increased and weight is reduced. And since the reel seat holding tube and the seat tube are reinforced with the reinforcement fiber impregnated with the same synthetic resin with the fishing rod material, the strength is increased to improve hit sensibility. Thus, the fishing rod having practically superior effect can be provided.

4. BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a partial cross sectional side view of a fishing rod related to one embodiment of the present invention.

FIG. 2 is a partial cross sectional side view of a conventional fishing rod.

1. Fishing Material
2. Reel Seat Holding Tube
3. Fixing Hood
4. Seat Tube
5. Nut
6. Hollow Male Screw Tube
7. Movable Hood

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審査請求　未請求　（全　頁）

⑤4考案の名称　釣　竿

⑵1実　願　昭59－171176

⑵2出　願　昭59(1984)11月12日

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明　　細　　書

1．考案の名称　　釣　　竿

2．実用新案登録請求の範囲

合成樹脂を含浸した強化繊維補強引揃えシート又は織布等からなる釣竿素材の後端外周に該釣竿素材と同材のリールシート保持筒を後方に突出するように嵌着し、上記リールシート保持筒の外周に固定フードを一端に固定した上記釣竿素材と同材のシート筒と、移動フードを嵌合すると共にナットが螺合された中空雄螺子筒とを嵌合固定したことを特徴とする釣竿。

3．考案の詳細な説明

（産業上の利用分野）

この考案は釣竿素材の後端外周にリールシートを取り付けた釣竿に関する。

（従来技術）

従来釣竿後端外周に天然コルク材等の握り材とパイプリールシートが夫々嵌合固定された釣竿では第2図のようにパイプリールシート12の内径に対し釣竿素材1の外径が細いので紙管13や熱可塑

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性の合成樹脂製中筒が中間に介在されているが、紙管は重く、水を含むと強度が弱くなり、パイプリールシートのリールシート部と中空雄螺子管部が分離形成されている時には両者の継ぎ目から水が入り易くなるので紙管を用いることが出来ない欠点があり、更に釣竿素材の外周に異質材料の紙管や合成樹脂製中筒や金属製パイプリールシートが設けられていると、獲物の当たりによる振動がリール脚とパイプリールシートを握る手に伝達されずらい欠点がある。

（考案の目的）

本考案は上記欠点に鑑み、釣竿素材の後端外周に釣竿素材と同材のリールシート保持管を嵌着してその外周に釣竿素材と同材のシート管を嵌合して軽量化し、水に強いと共に当たりの伝達を良好にした釣竿を提案することにある。

（考案の構成）

本考案は、合成樹脂を含浸した強化繊維補強引揃えシート又は織布等からなる釣竿素材の後端外周に該釣竿素材と同材のリールシート保持管を後

方に突出するように嵌着し、上記リールシート保持管の外周に固定フードを一端に固定した上記釣竿素材と同材のシート管と、移動フードを嵌合すると共にナットが螺合された中空雄螺子管とを嵌合固定したことである。

〔実施例〕

以下、図示の実施例によって本考案を説明すると、第1図で釣竿素材1は熱硬化性合成樹脂を含浸したガラス繊維や炭素繊維等の強化繊維補強引揃えシート又は織布等で中空状に形成され、その後端外周に釣竿素材1と同材の合成樹脂を含浸した強化繊維補強引揃えシート又は織布等からなる中空状のリールシート保持管2の一端が嵌着されて他端が後方に突出されている。

上記リールシート保持管2の外周には固定フード3が一端に固定された上記釣竿素材1と同材の合成樹脂を含浸した強化繊維補強引揃えシート又は織布等からなる中空状のシート管4が嵌合固定されると共にナット5が螺合された中空雄螺子管6が嵌合固定され、上記シート管4と中空雄螺子

管６の外周に移動フード７が摺動自在に嵌合されている。

上記釣竿素材１とリールシート保持管２と固定フード３の外周には天然コルク材等の握り材８が嵌合固定されてフォアグリップが形成され、後方に突出されたリールシート保持管２の内径に着脱自在に嵌合される筒部９と天然コルク材等の握り材10でエクステンショングリップが形成されている。

上記釣竿の固定フード３と移動フード７間にはリール脚の取付板11が取り付けられ、仕掛けが投擲される時はエクステンショングリップなしで行なわれ、釣系がリールに巻取られる時エクステンショングリップが取り付けられてリール操作がなされる。

釣竿が上記のように構成されると、細い釣竿素材１の外径と太いリールシートのシート管４と中空雄螺子管６の内径間を埋めるようにリールシート保持管２が釣竿素材１の外周に後方に突出するように嵌着され、リールシート保持管２とシート

管４は夫々釣竿素材１と同材の合成樹脂を含浸した強化繊維で補強形成されているので強度が増強されると共に水に強く、軽量化され、シート管４と中空雄螺子管６が分離されているので中空雄螺子管６が金属材の場合でも軽量化が損われず、リールシート保持管２とシート管４は釣竿素材１と同材が用いられたのでシート管４とリール脚を握った手に当たりの振動が良く伝達されて当たり感度が良くなる。

上記リールシート保持管２に着脱自在に嵌合されたエクステンショングリップは尻栓に置き換えてもよい。

（考案の効果）

本考案は上述のように細い釣竿素材の後端外周にリールシート保持管の一端を嵌着して他端を後方に突出し、その外周にリールシートの太いシート管と中空雄螺子管を嵌合したので水に強く、軽量化され、リールシート保持管とシート管は釣竿素材と同材の合成樹脂を含浸した強化繊維で補強形成されているので強度が増大されると共に当た

り感度が良くなる等実用上優れた効果を奏する釣竿を提供することができる。

4．図面の簡単な説明

図面は本考案の一実施例が示され、

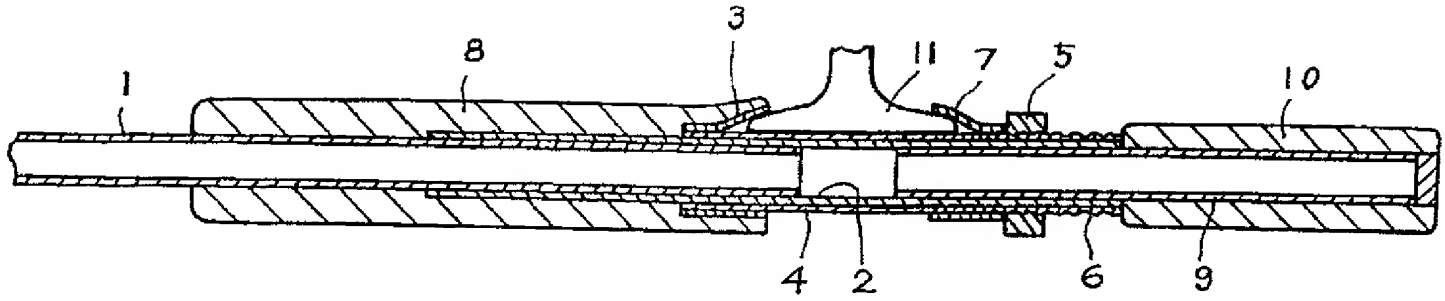
第1図は釣竿の要部断面側面図、

第2図は従来の釣竿の要部断面側面図である。

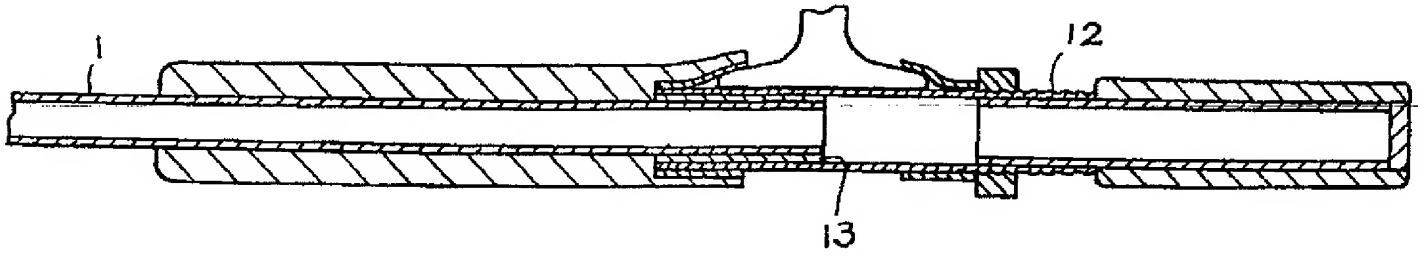
1…釣竿素材、2…リールシート保持管、3…固定フード、4…シート管、5…ナット、6…中空雄螺子管、7…移動フード。

実用新案登録出願人　ダイワ精工株式会社

第　1　図



第　2　図



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